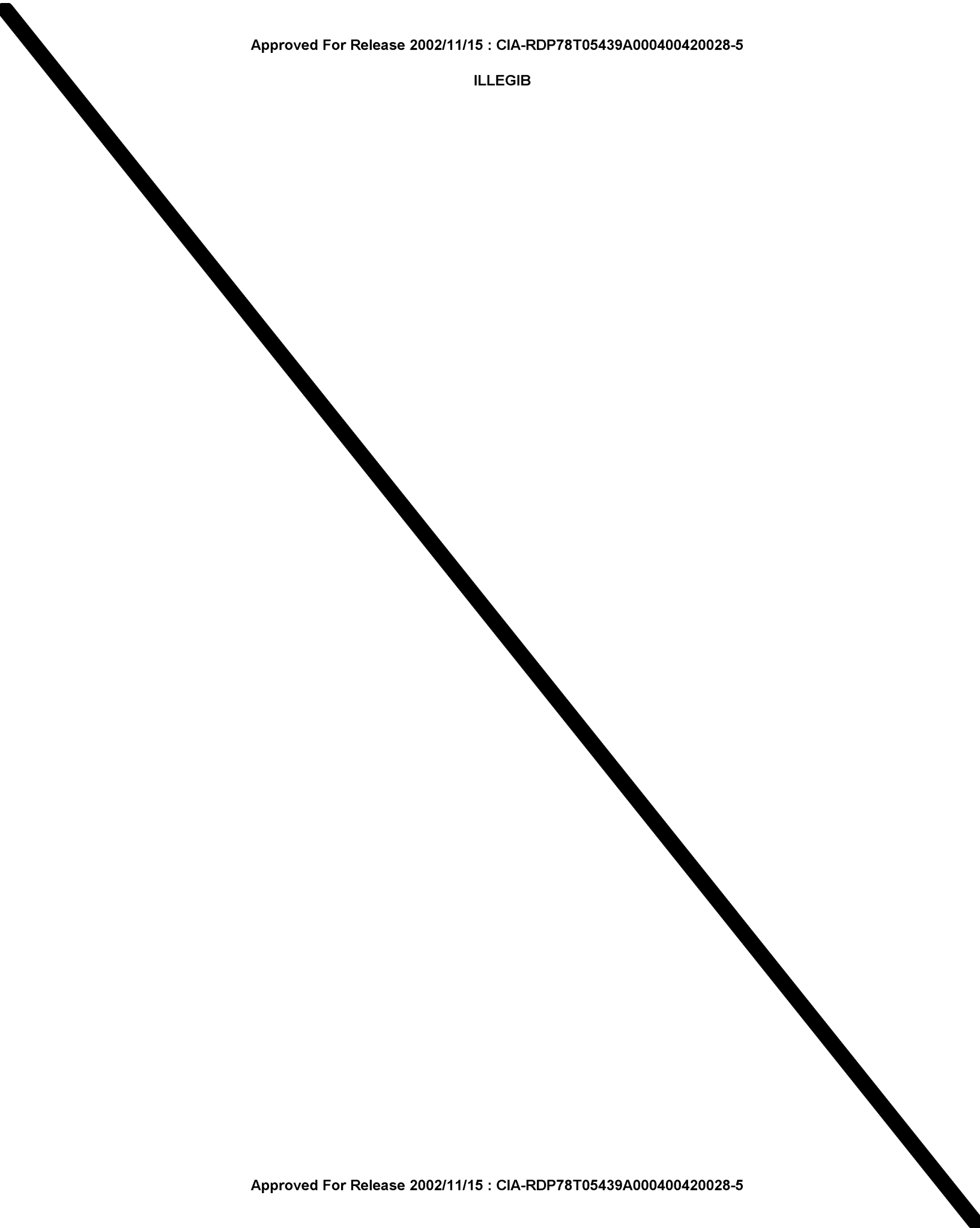
ILLEGIB



~~TOP SECRET~~

16811

Copy 4
7 Pages

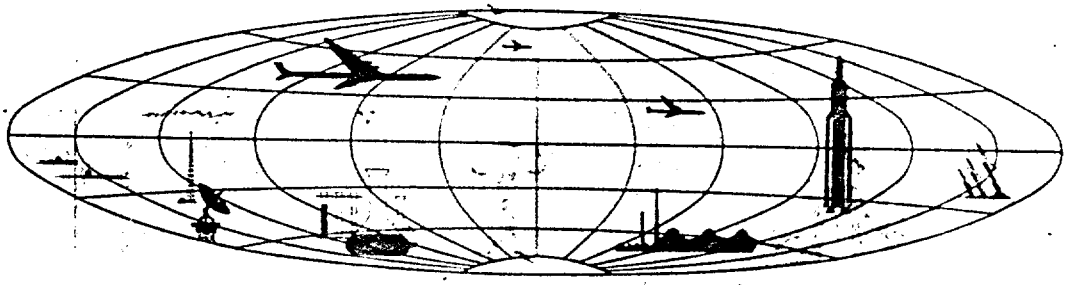
March 1965

PHOTOGRAPHIC INTERPRETATION REPORT

LOW BLOW AND FLAT FACE RADAR TOWERS LENINGRAD SAM SITE B29-3, USSR

CIA DIA

NATIONAL PHOTOGRAPHIC INTERPRETATION CENTER



~~TOP SECRET~~

TOP SECRET [redacted]

PHOTOGRAPHIC INTERPRETATION REPORT

LOW BLOW AND FLAT FACE RADAR TOWERS LENINGRAD SAM SITE B29-3, USSR

March 1965

NATIONAL PHOTOGRAPHIC INTERPRETATION CENTER

25X1

TOP SECRET [redacted]

25X1

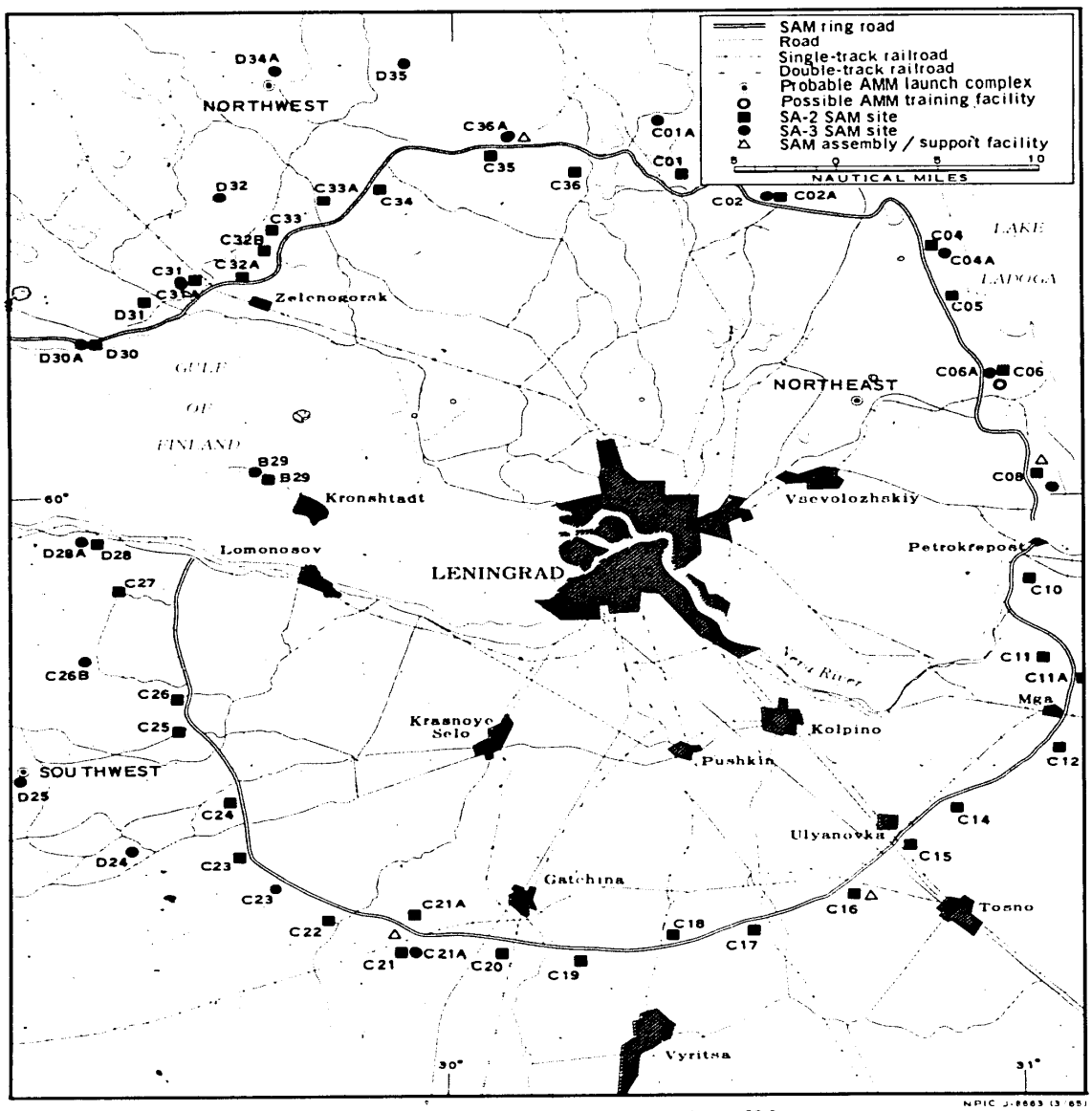


FIGURE 1. LOCATION OF LENINGRAD SAM SITE B29-3.

25

25

This report has been prepared in response to CIA requirement C-SI4-82,098, requesting drawings and mensuration of 2 radar towers, one with a LOW BLOW and the other with a FLAT FACE radar, at Leningrad SAM Site B29-3 [redacted] located at 60-01-20N 29-41-30E, Figure 1), as covered by small-format photography of [redacted]

25X1A
25X1D

Figures 2 and 3 present detailed drawings of the towers, which are similar lattice towers with platforms on top and are located 600 feet apart.

25X1B [redacted]

Both towers have the same dimensions. The latticed portions are [redacted] and the platforms are [redacted] Three complete "levels" or sections of each tower can be seen above the trees; the top section is [redacted] from the bottom of the platform to the first major crossmember below it, and the other 2 visible sections are each [redacted] high. Although the bottom portion of the tower is obscured by surrounding trees, it was determined that a total of six [redacted] sections would be required to reach approximate ground level from the top section of the tower. It was also assumed that the tower had footings [redacted] high. The heights of the six [redacted] sections, added to the assumed footing height, the [redacted] of the top section, and the [redacted] height of the guardrail on the platform give a total tower height of [redacted] from approximate ground level to guardrail. The height as determined from photography from [redacted] by the shadow method confirms this height to within [redacted] The platforms of both towers are [redacted] above the ground and approximately [redacted] above tree level. The height above tree level of course varies with tree height; however, both tower platforms are well above the surrounding trees. The top of the LOW BLOW radar is [redacted] above ground level and approximately [redacted] above tree level, and the top of the FLAT FACE radar is [redacted] above ground level and approximately [redacted] above tree level.

25X1D 25X1D 25X1D 25X1D 25X1D 25X1D 25X1D 25X1D 25X1D 25X1 25X1 25X1D 25X1 25X1D

Each tower has a guardrail completely enclosing the platform and guardrails around the first 2 sections below the platform; however, on the third section below the platform and possibly on the rest of the lower sections, guardrails appear only on the side near the stairs and do not completely enclose the section.

Although the LOW BLOW and FLAT FACE towers are similarly constructed and have the same dimensions, they differ in some respects. The LOW BLOW tower has 4 possible supports, 1 located on each corner of the platform. These supports are slightly higher than the radar and will possibly be used to support netting, sheeting, or some form of windbreak or weather protection. The LOW BLOW tower also has a possible structure or sheeting [redacted] enclosing 1 corner of the top section of the tower; the possible purpose of this enclosed corner cannot be determined. The FLAT FACE tower has neither the possible supports at the corners of the platform nor the enclosed corner of the top section. The LOW BLOW radar tower also has an unidentified long, narrow object, approximately [redacted] [redacted] attached to the bottom of the platform directly below the radar. The FLAT FACE tower does not have such an object. The FLAT FACE tower does have what appear to be triangular "plates" or a solid triangular mass on either

25X1 25X1D

25X1D

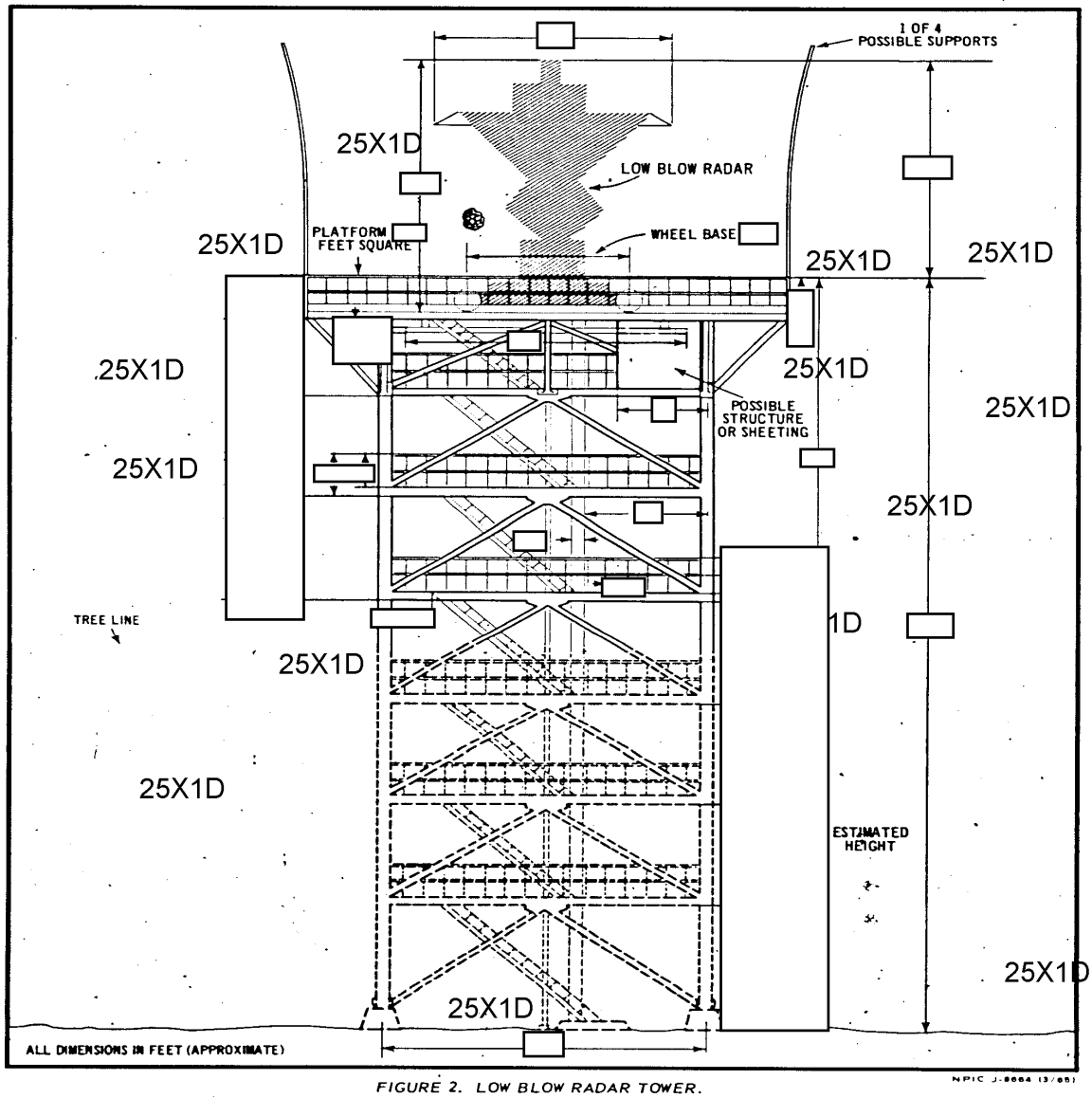


FIGURE 2. LOW BLOW RADAR TOWER.

NPIC J-8664 (3/65)

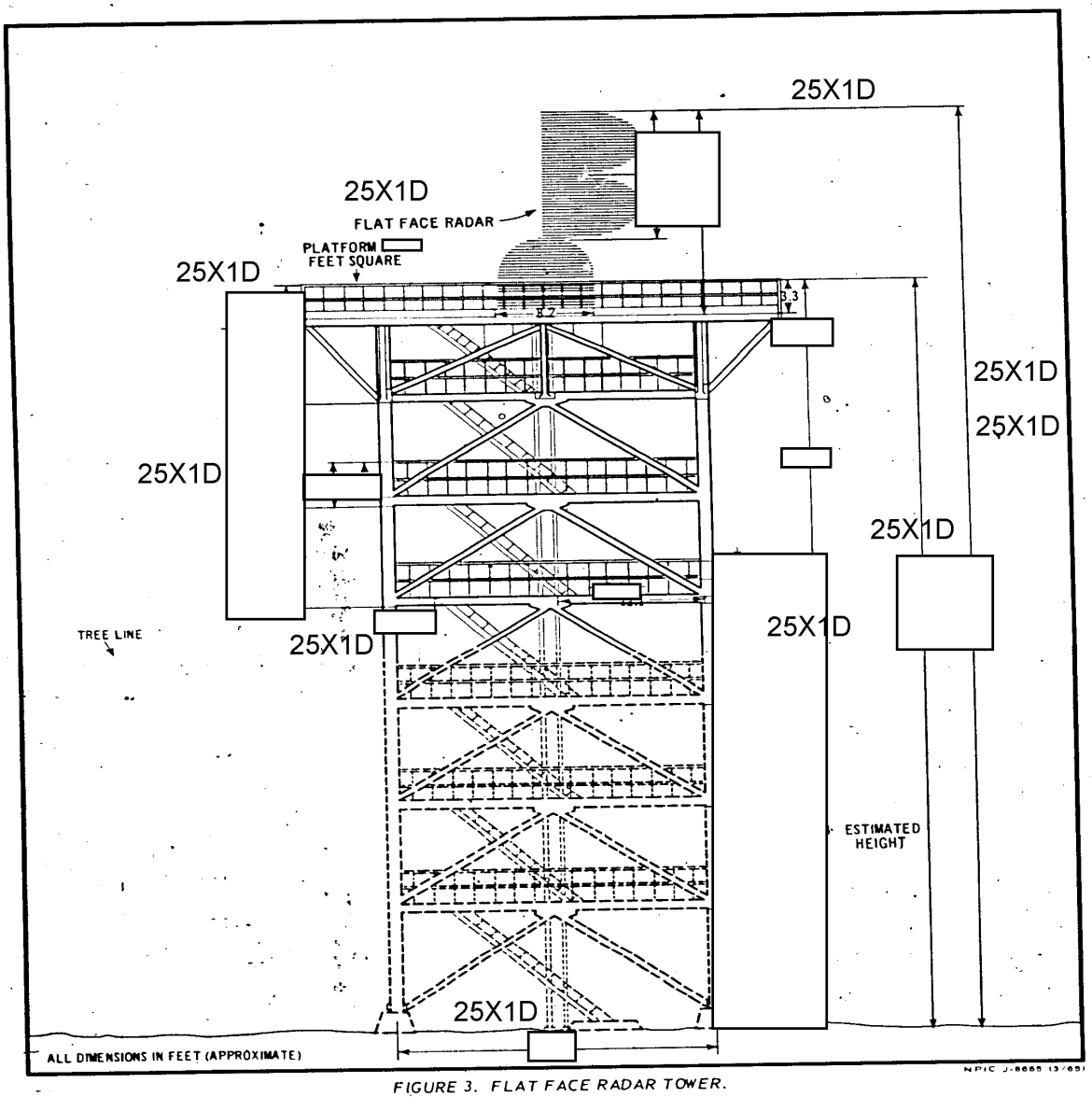


FIGURE 3. FLAT FACE RADAR TOWER.

25X1

25X1D FIGURE 4. LOW BLOW RADAR TOWER.

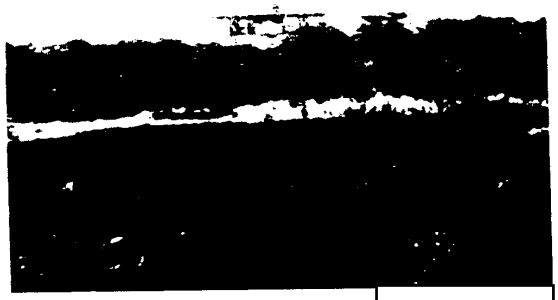


FIGURE 5. FLAT FACE RADAR TOWER.

25X1D

side of the central point where the angled support beams join the bottom of the platform; these triangular plates give a "bow tie" appearance to this portion of the top section of the tower. Both towers have 2 possible cables or cable conduits which appear to drop down from the platforms and through the centers of the towers and probably connect the radars with their associated ground-located equipment. The cables or conduits at the FLAT FACE tower both have small diameters. The larger of the LOW BLOW tower cables or conduits is in diameter.

25X1D

25X1D

25X1

25X1

[redacted] 25X1

REFERENCES

25X1D [redacted]

MAPS OR CHARTS

ACIC. US Air Target Chart, Series 200, Sheet 0103-25HL, 3d ed, Jun 62, scale 1:200,000 (SECRET)

AMS. Series N501, Sheet NO 35-3, 2d ed, Jul 59, scale 1:250,000 (UNCLASSIFIED)

AMS. Series M515, Sheet NP 35, 36-14, 2d ed, Feb 63, scale 1:250,000 (UNCLASSIFIED)

AMS. Series N701, Sheet 4537 I, 1st ed, Sep 62, scale 1:50,000 (UNCLASSIFIED)

AMS. Series N701, Sheet 4536 III, 1st ed, Mar 60, scale 1:50,000 (UNCLASSIFIED)

25X1

RELATED DOCUMENTS

NPIC. R-183 63, *Towers at SA-3 SAM Sites, USSR*, Aug 63 (TOP SECRET [redacted])

Foreign Technology Division, Air Force Systems Command. FTD-TS-62-10, *Sino-Soviet Bloc Radar Systems - Ground Radar*, 9 Nov 62 (SECRET)

NPIC. R-862 64, *SA-3 SAM Site Towers, Kapustin Yar/Vladimirovka Missile Test Center and Leningrad Area, USSR*, Oct 64 (TOP SECRET [redacted])

NPIC. R-340 64, *Newly Identified SA-3 SAM Site Towers, Leningrad Area, USSR*, May 64 (TOP SECRET [redacted])

NPIC. R-236 63, *Search for Elevated Electronics Equipment at SA-3 SAM Sites, USSR*, Oct 63 (TOP SECRET [redacted])

REQUIREMENT

CIA. C-SI4-82,086 25X1

25X1

NPIC PROJECT

12035 64

25X1